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REV. B
AS81044™/11

FEDERAL SUPPLY CLASS
6145

RATIONALE

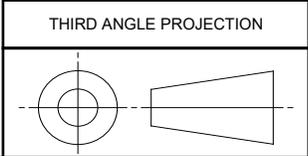
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STABILIZED NOTICE

THIS DOCUMENT HAS BEEN DECLARED "STABILIZED" BY THE SAE AE-8D WIRE AND CABLE COMMITTEE AND WILL NO LONGER BE SUBJECT TO PERIODIC REVIEWS FOR CURRENCY. USERS ARE RESPONSIBLE FOR VERIFYING REFERENCES AND CONTINUED SUITABILITY OF TECHNICAL REQUIREMENTS. NEWER TECHNOLOGY MAY EXIST.

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<https://www.sae.org/standards/content/AS81044/11B/>



CUSTODIAN: AE-8D		PROCUREMENT SPECIFICATION: AS81044	
	AEROSPACE STANDARD		AS81044™/11
	WIRE, ELECTRIC, CROSSLINKED POLYALKENE INSULATED, SILVER-COATED COPPER, LIGHT WEIGHT, 600-VOLT, 150 °C		

ISSUED 2000-09 REVISED 2011-12 REAFFIRMED 2017-03 STABILIZED 2023-04

NOTICE

THE REQUIREMENTS FOR ACQUIRING THE COMPONENTS DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF AS81044.

NOT RECOMMENDED FOR NEW DESIGN IN AIRCRAFT APPLICATIONS (SEE AS81044/12).

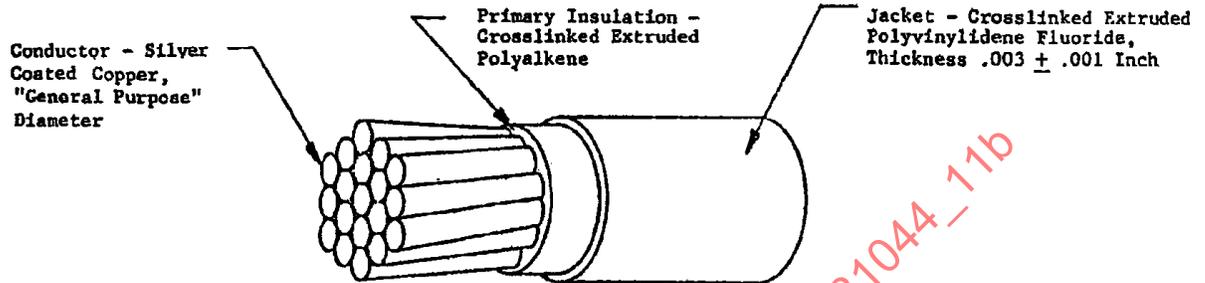


FIGURE 1 - AS81044/11 CONSTRUCTION

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	AEROSPACE STANDARD	AS81044™/11 SHEET 1 OF 3	REV. B
	WIRE, ELECTRIC, CROSSLINKED POLYALKENE INSULATED, SILVER-COATED COPPER, LIGHT WEIGHT, 600-VOLT, 150 °C		

TABLE 1 – CONSTRUCTION DETAILS

PART NO. 1/	WIRE SIZE	STRANDING (NUMBER OF STRANDS X AWG GAGE OF STRANDS)	DIAMETER OF STRANDED CONDUCTOR (INCHES)		FINISHED WIRE			
			(MIN)	(MAX)	RESISTANCE AT 20 °C (68 °F) (OHMS/1000 FT) (MAX)	DIAMETER (INCHES)	WEIGHT (LBS/1000 FT)	
							(NOM) 2/	(MAX)
M81044/11-30-*	30	7 X 38	.011	.012	100.7	.027 ± .002	.67	.71
M81044/11-28-*	28	7 X 36	.014	.015	63.8	.030 ± .002	.91	.96
M81044/11-26-*	26	19 X 38	.018	.020	38.4	.034 ± .002	1.3	1.4
M81044/11-24-*	24	19 X 36	.023	.025	24.3	.040 ± .002	2.0	2.1
M81044/11-22-*	22	19 X 34	.029	.032	15.1	.047 ± .002	2.9	3.1
M81044/11-20-*	20	19 X 32	.037	.040	9.19	.055 ± .002	4.4	4.6
M81044/11-18-*	18	19 X 30	.046	.050	5.79	.065 ± .002	6.8	7.0
M81044/11-16-*	16	19 X 29	.052	.057	4.52	.072 ± .003	8.5	8.9
M81044/11-14-*	14	19 X 27	.065	.072	2.88	.089 ± .004	13.4	13.9
M81044/11-12-*	12	37 X 28	.084	.089	1.90	.108 ± .004	20.7	21.7

1/ PART NO.: THE ASTERISKS IN THE PART NUMBER COLUMN, TABLES 1 AND 2, SHALL BE REPLACED BY COLOR CODE DESIGNATORS IN ACCORDANCE WITH MIL-STD-681. EXAMPLES: SIZE 20, WHITE – M81044/10-20-9; WHITE WITH ORANGE STRIPE – M81044/10-20-93.

2/ NOMINAL VALUES ARE FOR INFORMATION ONLY. NOMINAL VALUES ARE NOT REQUIREMENTS.

TABLE 2 – PERFORMANCE DETAILS

PART NO.	BEND TESTING				
	MANDREL DIAMETER (INCHES) (±3%)			TEST LOAD (LBS) (±3%)	
	LIFE CYCLE TEST AND ACCELERATED AGING TEST 1/	COLD BEND TEST	WRAP TEST	LIFE CYCLE TEST AND ACCELERATED AGING TEST 1/	COLD BEND TEST
M81044/11-30-*	.375	.375	.188	.25	.50
M81044/11-28-*	.375	.375	.188	.25	.50
M81044/11-26-*	.50	.50	.250	.25	.50
M81044/11-24-*	.50	.50	.250	.38	.50
M81044/11-22-*	.75	.75	.250	.38	1.0
M81044/11-20-*	.75	.75	.250	.38	1.0
M81044/11-18-*	1.00	1.00	.375	.50	1.0
M81044/11-16-*	1.00	1.00	.375	.50	1.0
M81044/11-14-*	1.50	1.50	.50	1.0	3.0
M81044/11-12-*	2.00	2.00	.50	1.0	3.0

1/ ALSO FOR BEND TESTS AFTER IMMERSION.

	AEROSPACE STANDARD	AS81044™/11 SHEET 2 OF 3	REV. B
	WIRE, ELECTRIC, CROSSLINKED POLYALKENE INSULATED, SILVER-COATED COPPER, LIGHT WEIGHT, 600-VOLT, 150 °C		